Message

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Sent: 7/27/2017 9:57:26 PM
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Administrator,

Today I attended the biannual National Toxicology Program (NTP) Executive Committee meeting and presented a high-level overview of EPA's PFAS activities. ORD's Lynn Flowers discussed ongoing efforts of the Cross-EPA PFAS Human Health Toxicity Workgroup. NTP provided an overview of their PFAS research, and other federal agencies also discussed their PFAS activities.

Hot Issues

Cape Fear PFAS sampling status meeting

On July 26th, ORD hosted a conference call meeting of staff and management involved in the collection of water samples from the Cape Fear River Basin in North Carolina and their analyses for the PFAS, GenX. The meeting brought together project participants from ORD, Region 4, North Carolina Department of Environmental Quality, and North Carolina Department of Health and Human Services. Participants discussed the status of and future plans for the project.

Provisional patent for lead exposure device

ORD has received a provisional patent for a lead exposure assessment device. This new device is very promising for measuring average lead concentrations at a drinking water tap in the home and reducing exposure to lead, a critical concern to the Agency and to water utilities and consumers across the country.

Economic Tradeoffs of Pasture Rotation for Vermont Dairy Farmers

A new project recently launched by Region 1, OW and ORD is assessing the tradeoffs and profitability for a system of pasture rotations for dairy cow grazing in Vermont. The Lake Champlain Dairy Farm Community Sustainability Project is a collaboration to reduce excess phosphorous loading to the Lake Champlain watershed and to comply with Total Maximum Daily Loads. The project will forecast short- and long-term social and economic tradeoffs to small dairy farms in the Lake Champlain watershed undergoing transition to pasture-based operation. Rotational grazing, which can reduce nutrient loading, is an alternative method available for some dairy farm operations. The project includes collaborators from the State of Vermont, the University of Vermont and the Lake Champlain Basin Program.

Upcoming public events

Specialized Training for Office of Pesticide Programs on Thyroid Toxicology

On July 31, ORD scientists will conduct a training session on 'Thyroid Toxicology' for OPP. Thyroid hormones are essential modulators of a wide variety of vertebrate physiological processes. Deficiencies in thyroid hormones, including chemical-induced deficiencies, are known to cause adverse effects in both the developing and adult organism. The lecture topics are tailored to improve the ability of EPA Program Office staff to evaluate data submissions.

Assisting Rural Communities in Puerto Rico with Small Drinking Water Systems

July 31-August 4, ORD, EPA Region 2 and the Inter-American University of Puerto Rico (IAUPR), will evaluate drinking water treatment and monitoring technologies in small communities near Patillas, PR, for compliance with the Safe Drinking Water Act and contributions to improving public health. The collaborators will train community volunteers to be citizen scientists by demonstrating how to download monitoring results and analyze bacteria samples. The project team will also evaluate two different configurations of biological sand filters for waterborne pathogen removal. This work is being conducted under a MOU between EPA and IAUPR and is associated with a Region 2 RARE Project.

National Water Experts to Share Insights at the Water Security Test Bed

On August 3, ORD is hosting a group of national water system experts to provide independent viewpoints on the concept, approach, implementation and sustainability of the Water Security Test Bed (WSTB). The WSTB, constructed at DOE's Idaho National Laboratory, is a full-scale facility that replicates a typical municipal drinking water piping system. The expert group includes Alan Roberson, Director at the Association of State Drinking Water Administrators, Lisa McFadden, Sr. Program Manager at the Water Environment Federation, Rob Renner, CEO of the Water Research Foundation, and others. The experts' insights will help plan the future use and capabilities of the WSTB including how best to expand its use as a national capability to support the nation's water sector.

Last week Highlights

Region 3 SBIR Workshop

On July 27 EPA Region 3 hosted an SBIR workshop at Villanova University for area small businesses to learn about opportunities to obtain funding to develop and commercialize their technologies. Companies heard from several panels including 1) Federal SBIR agencies on their funding opportunities (EPA, U.S. Department of Energy and U.S. Department of Agriculture), 2) state organizations that support small businesses, and 3) local small businesses that have received SBIR awards. Attendees were able to meet one on one with agencies to pitch their ideas. Acting Regional Administrator Cecil Rodrigues and ORD's Acting Associate Assistant Administrator Mary Ellen Radzikowski provided opening remarks, and April Richards, Program Manager for ORD's SBIR Program, spoke about the program.

Engaging Stakeholders on Innovative Cleanup Technologies

On July 27, the Region 8 Science and Technology Liaison met with the Silverton Planning Commission and other stakeholders to discuss innovative technologies that ORD is evaluating for use at the Bonita Peak Mining District (BPMD) Superfund Site in San Juan County, CO. The site includes the Gold King Mine that spilled wastewater into local waterways in 2015. The meeting is part of a stakeholder-requested series of discussions that will inform the community about work being done in the BPMD.

Community-Focused Exposure and Risk Screening Tool (C-FERST) Training for States

ORD held a C-FERST "train-the-trainer" webinar on July 26 for state environmental and public health staff, part of ORD's partnership with the Environmental Council of States (ECOS) and its research arm, the Environmental Research Institute of the States (ERIS). The webinar is intended to help new users gain a better understanding of the tool and begin to train others to use it. As targeted users of C-FERST, state environmental and public health agency staff are critical for providing user feedback on the tool so that it realizes its full value in helping states and local communities lower public health risks. ECOS/ERIS will be developing case studies with states that are using the tool. C-FERST is an online information access and mapping tool that offers a suite of resources, including structured community guides, local maps and reports, fact sheets, and links to other public health tools. It provides an easily-accessible resource for public health and environmental protection professionals to explore local-scale sources of exposure and associated risk reduction options.

Mine Tailings: Superfund

On July 20, the Region 7 Superfund and Technology Liaison participated in a meeting with ORD's Engineering Technical Support Center to assist with planning a disposal area for soil containing residual mined metals, known as mine tailings, for the Madison County Mines Superfund Site in Fredericktown, MO. Mine tailings from the site are impacting a nearby lake that serves as a public water supply. ORD's assistance will help Region 7 and local officials identify a disposal location.

New Modeling Tool Makes Significant Advances in Ability to Identify Specific Drinking Water Disinfection Byproducts of Concern

Research has evaluated associations between exposure to chemically treated drinking water, which generally contain numerous disinfection byproducts (DBPs), and reproductive and developmental effects such as still birth, low birth weight, and pregnancy loss. Toxicologists have studied associations between some individual DBPs and these effects, but there are few studies of complex DBP mixtures. This is an area of significant interest to the Office of Water and drinking water providers across the states. A new regression-based modeling tool helps determine which individual chemicals and mixture sub-sets drive adverse health effects, by allowing understanding of their contributions to the toxicity of a complex mixture. This is a critical accomplishment for mixtures toxicology and risk assessment, adding an important tool to the cumulative risk toolbox. Results of this collaborative effort appear in a special issue of the Journal of Environmental Science devoted to DBPs.

Recognition of EPA's Contribution to Million Hearts

ORD received a letter and certificate recognizing our contribution to the Million Hearts initiative from 2012-2016. Our collaboration with HHS CDC/CMS over the last few years has been substantial and ultimately resulted in CDC/CMS adopting a goal of increasing the awareness of the health effects of ambient air particle pollution among health care professionals and their at-risk patients into the new *Million Hearts 2022* program. Including new *Million Hearts* goals to reduce exposure to PM rests largely on ORD science or the science of its STAR grantees and will have a measurable benefit to public health and the wellbeing of Americans

EPA's Report on the Environment

Three new updates to the online Report on the Environment (ROE) were recently released. The latest changes include: 1) three updated video guides to help navigate the website, 2) new drinking water "Featured Indicator" on the home page, and 3) updated data for 31 indicators. EPA's ROE — released in 2015 — is an interactive resource that shows how the conditions of the environment and human health in the United States are changing over time. Over 80 indicators, detailing the status or trend of various aspects of the nation's environment or human health, are organized into five themes—Air, Water, Land, Human Exposure and Health, and Ecological Condition. http://www.epa.gov/roe.

Collaborative EPA/NOAA/USGS/NASA publication on identifying CyanoHABs in inland waterbodies using satellite remote sensing

The recent publication in *Harmful Algae*, A method for examining temporal changes in cyanobacterial harmful algal bloom spatial extent using satellite remote sensing, focuses on quantifying spatial extent of cyanoHABs in US lakes. This is the companion Ecological Indicators manuscript on the frequency reporting method for drinking and recreational waters.